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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/658,330	Applicant(s) STARR ET AL.	
	Examiner Joshua Kading	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5-19 and 21-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *9-16* is/are allowed.

6)☒ Claim(s) *1,5-8,17-19 and 21-27* is/are rejected.

7)☒ Claim(s) *1-5, 7, 8, 12, 13, 14, 17, 18, 20, and 24* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 1-5, 7, 8, 12, 13, 14, 17, 18, 20, and 24 are objected to because of the following informalities:

Claim 1, lines 15-16; and claim 24, lines 2-4 state, "at least one of the number of collisions... amount of the network usage." There is no antecedent basis for "the number of collisions" and "the network usage." Therefore, these should be changed to --at least one of a number of collisions... amount of network usage.--

Claim 5, line 15 states, "a value for the quality of service". Since there has already been a first disclosure of "a value for the quality of service" on line 13, it is suggested line 15 be changed to --the value for the quality of service--.

Claim 7, line 2; and claim 8, lines 1-2 state, "the transmission parameters". There is no antecedent basis for "the transmission parameters". Therefore, it is suggested that "the transmission parameters" be changed to --transmission parameters-- or --the communication parameters--.

Claim 12, line 3; and claim 13, line 3 state, "the original packet". For clarity, it is suggested that "the original packet" be changed to --the packet--.

Claim 14, line 17; claim 17, line 3; and claim 18, line 3 state, "the determined value of the quality of service". To be consistent with the claim language, it is suggested that "the determined value of the quality of service" be changed to --the calculated value of the quality of service--.

Claims 2, 3, 4, and 20 have all been "deleted" by applicant. However, the claims, as currently written, are not in proper format. Specifically, if claims are to be removed from consideration they should be "cancelled" instead of "deleted". This should be indicated in the claim status identifier at the beginning of each claim. Further, cancelled claims should have the claim text deleted. For up to date information on the proper format for claim amendments please refer to 37 CFR § 1.121.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 21-23, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,774,656, Hattori et al. (Hattori) in view U.S. Patent 5,903,558, Jones et al. (Jones).

In regard to claim 5, Hattori discloses "a method for managing performance information for a communication between communication system terminal endpoints communication of an Internet Protocol network (col. 19, lines 36-40 where this is taken

to say that TCP/IP can be used as a communication protocol in the network), comprising the steps of:

transmitting a Diagnostic Configuration Message from a Diagnostic Supervisor to at least one TE, wherein the DS is capable of being coupled to the at least one TE (col. 11, lines 27-37 where apparatus B is the TE, apparatus C is the DS, and the benchmark is the DCM);

generating Diagnostic Messages at the at least one TE based on diagnostic information concerning IP network transmissions in which the at least one TE participates, the DCM instructing the at least one TE how to format and under what criteria to transmit the DMs (col. 11, lines 37-41 where the results of the execution of the benchmark program is the DM and is sent back when the benchmark is finished executing, and since the network is TCP/IP network, the TE must be able to format the DM correctly);

transmitting the DMs from the at least one TE to at least one DS (col. 11, lines 37-41 where the DM is clearly sent back to the DS from the TE)..."

However, Hattori lacks what Jones discloses, "calculating a value for [a] quality of service of the communication based on the DMs (col. 8, lines 13-18); wherein the step of calculating the value for the QoS includes calculating a TE specific QoS for each of a near-end TE and at least one far-end TE (col. 8, lines 33-49 where the upstream and downstream connection corresponds to the near-end TE and far-end TE and the QoS of each stream must be calculated in order for it to be compared against a threshold)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the calculating of the QoS for a near-end TE and far-end TE with the rest of the method for the purpose of determining the current QoS of each connection. The motivation for knowing the QoS of a connection is so that if it falls below a given level, appropriate corrective action can be taken so that little to no bandwidth will be lost.

In regard to claim 21, Hattori discloses "a system for managing diagnostic information for a communications system, comprising:

a plurality of TEs capable of communicating over an IP network (figure 1, elements 101, 104, 107, 117 are all TEs; col. 19, lines 36-40 where this is taken to say that TCP/IP can be used as a communication protocol in the network); and

a DS capable of being coupled to the IP network, wherein the DS transmits a DCM to the TEs (col. 11, lines 27-37 where apparatus B is the TE, apparatus C is the DS, and the benchmark is the DCM); and

wherein one of more of the TEs generate a DMs based on diagnostic information concerning IP network connections in which the one or more of the TEs participate, the DCM instructs the TEs how to format and when to transmit the DM to the DS...(col. 11, lines 37-41 where the results of the execution of the benchmark program is the DM and is sent back when the benchmark is finished executing, and since the network is TCP/IP network, the TE must be able to format the DM correctly)."

However, Hattori lacks what Jones discloses, "the DS calculates a quality of service based on the information in each DM from each TE (col. 8, lines 13-18); wherein the method further includes selectively adjusting one of a number of different transmission parameters of each TE based on the QoS (col. 8, lines 33-49 whereby changing the amount of data transmitted on the upstream due to degraded QoS means that a transmission parameter (read: which stream the data is transmitted on) of a TE have been selectively changed as a direct result of the QoS)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the calculating of the QoS and changing transmission parameters based on the QoS with the rest of the system for the purpose of determining the current QoS of each connection. The motivation for knowing the QoS of a connection is so that if it falls below a given level, appropriate corrective action can be taken so that little to no bandwidth will be lost.

Regarding claim 22, Hattori and Jones disclose the system of claim 21. However, Jones lacks what Hattori further discloses, "wherein each of the TEs transmit the DM to a plurality of DSs and at least one TE (col. 11, lines 37-41 where the results of the execution of the benchmark program is the DM and is sent back when the benchmark is finished executing and as seen in figure 1 the communication system is a LAN and as read in figure 4, element 402 messages sent across the LAN are broadcast, thus all units receive the messages and therefore, at least one TE has received the DM)." It would have been obvious to one of ordinary skill in the art at the time of invention to

include the transmitting of the DM to DSs and TEs for the same reasons and motivation as in claim 21.

Regarding claim 23, Hattori and Jones disclose the system of claim 21. However, Jones lacks what Hattori further discloses, "wherein the DS comprises at least one of: a Configuration Manager (figure 1, element 108 where the Local Directory of the DS holds configuration information from all units on the LAN as suggested at col. 10, lines 50-53)..." It would have been obvious to one of ordinary skill in the art at the time of invention to include the Configuration Manager for the same reasons and motivation as in claim 21.

In regard to claim 26, Hattori discloses "a computer program product comprising a computer usable medium having control logic stored therein for causing a computer to [manage] diagnostic and performance information for communications system TEs communicating over an IP network (figure 1, where all the processors have some kind of computer usable medium having control logic stored therein as is known in the art; col. 19, lines 36-40 where this is taken to say that TCP/IP can be used as a communication protocol in the network), the control logic compromising:

a first computer readable program code means for causing the computer to transmit a Diagnostic Configuration Message from a Diagnostic Supervisor to at least one TE, wherein the DS is capable of being coupled to the at least one TE (col. 11, lines

27-37 where apparatus B is the TE, apparatus C is the DS, and the benchmark is the DCM);

a second computer readable program code means for causing the computer to generate Diagnostic Messages at the at least one TE based on diagnostic information concerning IP network transmissions in which the at least one TE participates, the DCM instructing the at least one TE how to format and under what criteria to transmit the DMs (col. 11, lines 37-41 where the results of the execution of the benchmark program is the DM and is sent back when the benchmark is finished executing, and since the network is TCP/IP network, the TE must be able to format the DM correctly);

a third computer readable program code means for causing the computer to transmit the DMs from the at least one TE to at least one DS (col. 11, lines 37-41 where the DM is clearly sent back to the DS from the TE)..."

However, Hattori lacks what Jones discloses, "a fourth computer readable program code means for causing the computer to generate a quality of service based on performance information in the DMs (col. 8, lines 13-18); wherein one of a number of different transmission parameters are selectively adjusted on the basis of the QoS generated by the fourth computer readable program (col. 8, lines 33-49 whereby changing the amount of data transmitted on the upstream due to degraded QoS means that a transmission parameter (read: which stream the data is transmitted on) of a TE have been selectively changed as a direct result of the QoS)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the calculating of the QoS and changing transmission parameters

based on the QoS with the rest of the system for the purpose of determining the current QoS of each connection. The motivation for knowing the QoS of a connection is so that if it falls below a given level, appropriate corrective action can be taken so that little to no bandwidth will be lost.

In regard to claim 27, Hattori and Jones disclose the computer program product of claim 26. However, Hattori lacks what Jones further discloses, "a fifth computer readable program code means for causing the computer to transmit the DMs to one or more TEs (col. 11, lines 37-41 where the DM is clearly sent back to the DS from the TE)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the fifth computer readable program code means with the computer program product of claim 26 for the same reasons and motivation as in claim 26.

Claims 1, 6-8, 17, 19, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. in view of Jones et al., and in further view of U.S. Patent 6,104,700, Haddock et a. (Haddock).

In regard to claim 1, Hattori discloses "a method for managing performance information for a communication between communication system terminal endpoints communication of an Internet Protocol network (col. 19, lines 36-40 where this is taken to say that TCP/IP can be used as a communication protocol in the network), comprising the steps of:

transmitting a Diagnostic Configuration Message from a Diagnostic Supervisor to at least one TE, wherein the DS is capable of being coupled to the at least one TE (col. 11, lines 27-37 where apparatus B is the TE, apparatus C is the DS, and the benchmark is the DCM);

generating Diagnostic Messages at the at least one TE based on diagnostic information concerning IP network transmissions in which the at least one TE participates, the DCM instructing the at least one TE how to format and under what criteria to transmit the DMs (col. 11, lines 37-41 where the results of the execution of the benchmark program is the DM and is sent back when the benchmark is finished executing, and since the network is TCP/IP network, the TE must be able to format the DM correctly);

transmitting the DMs from the at least one TE to at least one DS (col. 11, lines 37-41 where the DM is clearly sent back to the DS from the TE)..."

However, Hattori lacks "calculating a value for [a] quality of service of the communication based on the DMs." Jones however, discloses "calculating a value for a quality of service of the communication based on the DMs (col. 8, lines 13-18)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the calculating of the QoS with the rest of the method for the purpose of determining the current QoS of each connection. The motivation for knowing the QoS of a connection is so that if it falls below a given level, appropriate corrective action can be taken so that little to no bandwidth will be lost.

Hattori and Jones however, further lack what Haddock discloses, "wherein the quality of service is based on communication parameters including at least one of a number of collisions, jitter, amount of lost packets and amount of network usage (col. 8, lines 1-8); and wherein the quality of service is based on weighting the communication parameters, the weighting based on an importance associated with each communication parameter (figure 4, element 440 as read in col. 11, lines 59-61 where scheduling based on priority is the same as weighting based on an importance associated with each QoS)."

It would have been obvious to one of ordinary skill in the art at the time of invention to include the QoS based on a variety of communication parameters and weighting the QoS based on importance for the purpose of implementing an output schedule for queued data based on priority. The motivation for implementing a schedule for output is so that if there are packets that are to be outputted at the same time, a decision can be made on which is outputted first based on priority, thus avoiding a blocking situation of the output (Haddock, col. 11, lines 20-31).

In regard to claim 7, Hattori, Jones, and Haddock disclose the method of claim 1. However, Hattori and Haddock lack what Jones further discloses, "the method further includes adjusting the transmission parameters of each TE based on the quality of service (col. 8, lines 33-49 where by changing circuit types with different characteristics the transmission parameters must be changed to accommodate the new circuit type)." It would have been obvious to one with ordinary skill in the art to include the adjusting of

transmission parameters with the method of claim 1 for the same reasons and motivation as in claim 1.

In regard to claim 8, Hattori, Jones, and Haddock disclose the method of claim 7. However, Hattori and Haddock lack what Jones further discloses, "the adjusting the transmission parameters of each TE based on the quality of service is performed in real time (col. 8, lines 33-49 where it is assumed the changing from one stream/circuit to another is done in real time to maintain the connection with the user defined QoS)." It would have been obvious to one with ordinary skill in the art to include the adjusting of transmission parameters in real time with the method of claim 7 for the same reasons and motivation as in claim 7.

In regard to claim 17, Hattori, Jones, and Haddock disclose the method of claim 1. However, Hattori and Haddock lack what Jones further discloses, "the method further comprising the step of rerouting an IP network connection between two or more TEs to the public switched telephone network based on the determined value of the quality of service relative to a threshold value (figure 3, where there are two networks, an IP network and a PSTN network; col. 6, lines 19-37 where the ISDN circuit switched data is carried over the PSTN)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the PSTN with the method of claim 1 for the same reasons and motivation as in claim 1.

In regard to claim 19, Hattori, Jones, and Haddock disclose the method of claim 1. However, Hattori and Haddock lack what Jones further discloses, "the communication is voice, modem, facsimile, video or data transmissions (col. 8, line 44 where it is stated that the call is a data call)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the data communication with the method of claim 1 for the same reasons and motivation as in claim 1.

Regarding claim 6, Hattori and Jones disclose the method of claim 5. However, Hattori and Jones lack what Haddock discloses, "wherein each TE specific quality of service is associated with a weighting, the weighting assigned to each TE based on an importance assigned to that TE (figure 4, element 440 as read in col. 11, lines 59-61 where scheduling based on priority is the same as weighting based on an importance associated with each QoS)." It would have been obvious to one of ordinary skill in the art at the time of invention to include the weighting the QoS based on importance for the purpose of implementing an output schedule for queued data based on priority. The motivation for implementing a schedule for output is so that if there are packets that are to be outputted at the same time, a decision can be made on which is outputted first based on priority, thus avoiding a blocking situation of the output (Haddock, col. 11, lines 20-31).

In regard to claim 24, Hattori and Jones disclose the system of claim 21. However, Hattori and Jones lack what Haddock discloses, "the quality of service is

based on communication parameters including at least one of the number of collisions, jitter, amount of lost packets, and amount of the network usage (col. 8, lines 1-8)." It would have been obvious to one of ordinary skill in the art at the time of invention to include the QoS based on a variety of communication parameters for the purpose of implementing an output schedule for queued data based on priority. The motivation for implementing a schedule for output is so that if there are packets that are to be outputted at the same time, a decision can be made on which is outputted first based on priority, thus avoiding a blocking situation of the output (Haddock, col. 11, lines 20-31).

Regarding claim 25, Hattori, Jones, and Haddock disclose the system of claim 24. However, Hattori and Jones lack what Haddock further discloses, "wherein the quality of service is based on weighting the communication parameters, the weighting based on an importance associated with each communication parameter (figure 4, element 440 as read in col. 11, lines 59-61 where scheduling based on priority is the same as weighting based on an importance associated with each QoS)." It would have been obvious to one of ordinary skill in the art at the time of invention to include the weighting for the same reasons and motivation as in claim 24.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori, Jones, and Haddock as applied to claim 1 above, and further in view of U.S. Patent 5,461,611, Drake, Jr. et al. (Drake).

In regard to claim 18, Hattori, Jones, and Haddock disclose the method of claim 1. However, Hattori, Jones, and Haddock lack "the step of determining whether to terminate a communication based on the determined value of the quality of service relative to a threshold value." Drake however, discloses "the step of determining whether to terminate a communication based on the determined value of the quality of service relative to a threshold value (col. 13, lines 63-67 and col. 14, lines 1-14 whereby a failure in the system that effects a communication leads to a degradation in the QoS by the very nature of the connection failure, therefore the communication is terminated)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the communication termination with the method of claim 1 for the purpose of allocating bandwidth to users with good connections. The motivation being not to waste resources.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,553,515 B1, Gross et al. (Gross) in view of Jones et al. and in further view of Haddock et al.

Regarding claim 1, Gross lacks what Jones discloses, "calculating a value for [a] quality of service of the communication based on the DMs." Jones however, discloses "calculating a value for a quality of service of the communication based on the DMs (col. 8, lines 13-18)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the calculating of the QoS with the rest of the method for the purpose of determining the current QoS of each connection. The motivation for knowing the QoS of a connection is so that if it falls below a given level, appropriate corrective action can be taken so that little to no bandwidth will be lost.

Hattori and Jones however, further lack what Haddock discloses, "wherein the quality of service is based on communication parameters including at least one of a number of collisions, jitter, amount of lost packets and amount of network usage (col. 8, lines 1-8); and wherein the quality of service is based on weighting the communication parameters, the weighting based on an importance associated with each communication parameter (figure 4, element 440 as read in col. 11, lines 59-61 where scheduling based on priority is the same as weighting based on an importance associated with each QoS)."

It would have been obvious to one of ordinary skill in the art at the time of invention to include the QoS based on a variety of communication parameters and weighting the QoS based on importance for the purpose of implementing an output schedule for queued data based on priority. The motivation for implementing a schedule for output is so that if there are packets that are to be outputted at the same time, a decision can be made on which is outputted first based on priority, thus avoiding a blocking situation of the output (Haddock, col. 11, lines 20-31).

Claim 5 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,553,515 B1, Gross et al. (Gross) in view of Jones et al.

Regarding claim 5, Gross lacks what Jones discloses, "calculating a value for [a] quality of service of the communication based on the DMs (col. 8, lines 13-18); wherein the step of calculating the value for the QoS includes calculating a TE specific QoS for each of a near-end TE and at least one far-end TE (col. 8, lines 33-49 where the upstream and downstream connection corresponds to the near-end TE and far-end TE and the QoS of each stream must be calculated in order for it to be compared against a threshold)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the calculating of the QoS for a near-end TE and far-end TE with the rest of the method for the purpose of determining the current QoS of each connection. The motivation for knowing the QoS of a connection is so that if it falls

below a given level, appropriate corrective action can be taken so that little to no bandwidth will be lost.

Claims 21 and 22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 21 of U.S. Patent No. 6,553,515 B1, Gross et al. (Gross) in view of Jones et al.

Regarding claim 21 of the instant application, Gross lacks what Jones discloses, "the DS calculates a quality of service based on the information in each DM from each TE (col. 8, lines 13-18); wherein the method further includes selectively adjusting one of a number of different transmission parameters of each TE based on the QoS (col. 8, lines 33-49 whereby changing the amount of data transmitted on the upstream due to degraded QoS means that a transmission parameter (read: which stream the data is transmitted on) of a TE have been selectively changed as a direct result of the QoS)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the calculating of the QoS and changing transmission parameters based on the QoS with the rest of the system for the purpose of determining the current QoS of each connection. The motivation for knowing the QoS of a connection is so that if it falls below a given level, appropriate corrective action can be taken so that little to no bandwidth will be lost.

Regarding claim 22 of the instant application, Gross and Jones disclose the method of claim 21. Gross (in claim 21) discloses claim 22 of the instant application. Jones also further discloses claim 22 of the instant application, "wherein each of the TEs transmit the DM to a plurality of DSs and at least one TE (col. 11, lines 37-41 where the results of the execution of the benchmark program is the DM and is sent back when the benchmark is finished executing and as seen in figure 1 the communication system is a LAN and as read in figure 4, element 402 messages sent across the LAN are broadcast, thus all units receive the messages and therefore, at least one TE has received the DM)." It would have been obvious to one of ordinary skill in the art at the time of invention to include the transmitting of the DM to DSs and TEs for the same reasons and motivation as in claim 21.

Claim 23 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 22 of U.S. Patent No. 6,553,515 B1, Gross et al. (Gross) in view of Jones et al.

Regarding claim 23 of the instant application, Gross (in claim 22) discloses claim 23 of the instant application. Jones also further discloses claim 23 of the instant application, "wherein the DS comprises at least one of: a Configuration Manager (figure 1, element 108 where the Local Directory of the DS holds configuration information from all units on the LAN as suggested at col. 10, lines 50-53)..." It would have been obvious to one of ordinary skill in the art at the time of invention to include the Configuration Manager for the same reasons and motivation as in claim 21.

Claim 26 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 35 of U.S. Patent No. 6,553,515 B1, Gross et al. (Gross) in view of Jones et al.

Regarding claim 26 of the instant application, Gross lacks what Jones discloses, "a fourth computer readable program code means for causing the computer to generate a quality of service based on performance information in the DMs (col. 8, lines 13-18); wherein one of a number of different transmission parameters are selectively adjusted on the basis of the QoS generated by the fourth computer readable program (col. 8, lines 33-49 whereby changing the amount of data transmitted on the upstream due to degraded QoS means that a transmission parameter (read: which stream the data is transmitted on) of a TE have been selectively changed as a direct result of the QoS)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the calculating of the QoS and changing transmission parameters based on the QoS with the rest of the system for the purpose of determining the current QoS of each connection. The motivation for knowing the QoS of a connection is so that if it falls below a given level, appropriate corrective action can be taken so that little to no bandwidth will be lost.

Claim 27 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 36 of U.S. Patent No. 6,553,515 B1, Gross et al. (Gross) in view of Jones et al.

Regard claim 27, Gross (in claim 36) discloses claim 27 of the instant application. Jones also further discloses claim 27 of the instant application, "a fifth computer readable program code means for causing the computer to transmit the DMs to one or more TEs (col. 11, lines 37-41 where the DM is clearly sent back to the DS from the TE)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the fifth computer readable program code means with the computer program product of claim 26 for the same reasons and motivation as in claim 26.

Response to Arguments

Applicant's arguments filed 12 August 2004 have been fully considered but they are not persuasive.

Regarding claims 21 and 26, applicant argues that Hattori in view of Jones (specifically Jones) does not teach, "selectively adjusting one of a number of different transmission parameters on the basis of QoS." The examiner respectfully disagrees.

As noted in the rejection above, Jones fully reads on this limitation of claims 21 and 26 by the mere fact that the transmission parameter (read: communication connection/channel) is adjusted in response to the degraded value of the current QoS. Further, there are inherently many different communication parameters associated with a connection, these include bandwidth, packet size, delay, flow control, error control, etc. Jones however, chooses to adjust only the connection type. Therefore, Hattori in view of Jones reads on applicant's claim invention.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,628,610 B1, Waclawsky et al. shows the queueing and scheduling of packets based on different priorities. U.S. Patent 5,408,465, Gusella et al. shows the calculating of a QoS value for far-end and near-end terminals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joshua Kading
Examiner
Art Unit 2661

March 9, 2005

BOB PHUNKULH
PRIMARY EXAMINER